

# Work Order ID 64096

Wednesday, November 24, 2010 8:52:44 AM



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Item ID:	D3562-042	Accept		Setup	Start	
Revision ID:						
Item Name:	Step Assembly, RH				Stop	
Start Date:	11/24/2010	Start Qty:	2.00			
Required Date:	11/30/2010	Req'd Qty:	2.00			
Reference:						

Approvals:	Process Plan:		Date:	10-11-24	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D3562	Rev E								

100		0.00							
	Large Fab								
Large Fab		0.00							
Large Fab	Memo								
	1-Cut D2622 extrusion as per Dwg D3562								
	2-Deburr and bevel ends for welding								

110		0.00							
	QC5- Inspect part completeness to step on W/O								
QC		0.00							
Quality Control	Memo								

120		0.00							
	Chemical Conversion Coat per QSI005 4.1								
HandFinish		0.00							
Hand Finishing	Memo								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_






NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



**NOTE:** Date & initial all entries




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Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start   
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00	<i>10/12/06</i>			<i>2</i>	<i>0</i>		<i>[Signature]</i>
140  Small Fab Small Fab	Small Fab  Memo 1- Drill Rivet holes as per dwg D3562. Touch up alodine 2- Rivet legs using Magnabond as per dwg D3562. *****Ensure to wipe off any excess magnabond ***** A/R Magnabond 6398 Batch: <i>1114158</i>	0.00 0.00				<i>2</i>	<i>0</i>		<i>[Signature]</i> <i>10.12.16</i>
150  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00				<i>12</i>	<i>0</i>		<i>[Signature]</i>

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Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  Large Fab	Large Fab	0.00							
	Memo	0.00							
	1-Weld end caps as per Dwg D3562& QSI 004. Inspect for foreign objects as per QSI 024. A/RAluminum Rod <u>M108436</u> 2-Grind end cap welds flush as per Dwg D3562								
170  QC	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
	Memo	0.00							
	Quality Control								
180  QC	QC5- Inspect part completeness to step on W/O	0.00							
	Memo	0.00							
	Quality Control								

*10-11-16 2*

*2 0 BE 10/2/20*

*8 10/12/20*

*12 RH*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_






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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries




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Required Date:	11/30/2010	Req'd Qty:	2.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00		7 10/12/20		X2	0		
200  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M115951 Memo START TIME: 9:00 OVEN TEMPERATURE: 320° FINISH TIME: 9:30	0.00  0.00				2		10-12-21	
210  HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch M1157910 Memo	0.00  0.00		10/12/21		2	0		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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**Work Order ID 64096**

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Item ID: D3562-042

Accept

Setup Start

Revision ID:

Stop

Item Name: Step Assembly, RH

Start Date: 11/24/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 11/30/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

220

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

*EP 11/01/04 (2)*

230

Identify as per dwg & Stock Location: *6A*

0.00



Packaging

Memo

0.00

Packaging

*w/o 63812**EP 11/01/04*

240

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

*CK 11/01/05*  
*MF*  
*11-01-04*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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# Picklist Print

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Page 1

Work Order ID: 64096

Parent Item: D3562-042

Parent Item Name: Step Assembl y, RH



Start Date: 11/24/2010

Required Date: 11/30/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 06-11-09 JLM  
 IPP rev B ECN 987 07.10.09 EC verified by: DD  
 IPP Rev:C ECN1048 07-12-18 DD verified by: EC  
 IPP Rev:D 08-07-28 add chemical conversion coat DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2622-120C

Manufactured

No

100

Each

64.8200

1

2



Step Extrusion

Location

Loc Qty

Loc Code

WA

64.82

55214

3.42

58544

1

61208

60.4

D2734

Manufactured

No

140

Each

64.0000

2

4



Step End Plate

Location

Loc Qty

Loc Code

WA

64

61209

19

62931

45

D3560-042

Manufactured

No

140

Each

8.0000

1

2



Arm Weldment

Location

Loc Qty

Loc Code

WA

8

48386

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

Wednesday, November 24, 2010 8:52:48 AM

Page 2

Work Order ID: 64096

Parent Item: D3562-042

Parent Item Name: Step Assemb., RH

Start Date: 11/24/2010

Required Date: 11/30/2010

Start Qty: 2.00

Required Qty: 2.00

D3560-044

Manufactured No

140 Each

9.0000

1

2



Arm Weldment



10.12.13

Location

Loc Qty

Loc Code

WA

9

47866

2

48388

7

2

MS20600-AD4W5

Purchased

No

160 Each

600.0000

32

64



Blind Rivet



10.12.16

Location

Loc Qty

Loc Code

ST321

600

111477

300

114382

300

Wednesday, November 24, 2010 8:52:48 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

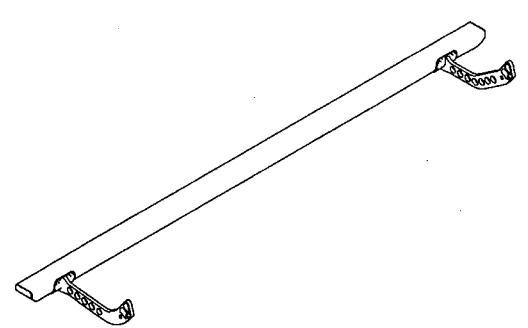
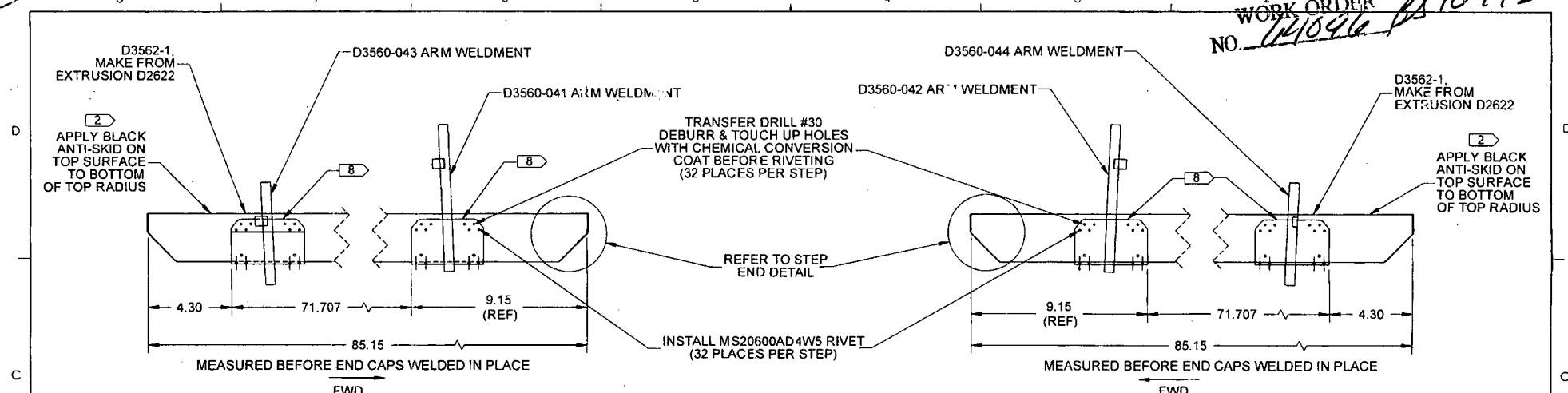
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

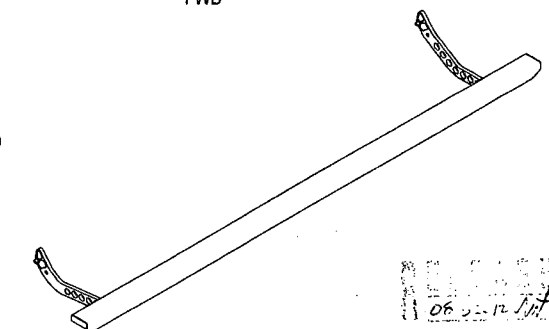
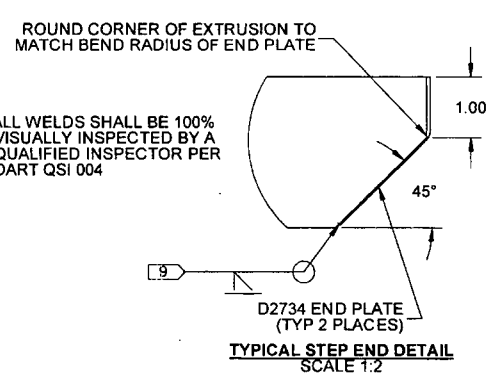
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SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 141046 181011-20



**D3562-041 LH STEP ASSEMBLY**



**D3562-042 RH STEP ASSEMBLY**

- NOTES:  
1) MATERIAL: N/A  
2) FINISH:  
i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY  
ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3  
iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
6) IDENTIFICATION: NONE  
7) WEIGHT: 8.79 lbs  
8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.  
9) WELDING: PER DART QSI 004

QTY -041	QTY -042	P/N	DESCRIPTION
X	X	D3562-041	LH STEP ASSEMBLY
		D3562-042	RH STEP ASSEMBLY
1		D3560-041	ARM WELDMENT
	1	D3560-042	ARM WELDMENT
1		D3560-043	ARM WELDMENT
	1	D3560-044	ARM WELDMENT
32	32	MS20600AD4W5	RIVET
2	2	D2734	END PLATE

E	ADD QTY (2) TO D2734 END PLATE ON D3562-042	PH	08.01.11
D	REMOVE D2808 SPACER NOTE; REDRAWN IN SOLIDWORKS	DC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE
DESIGN	gp	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SE		
CHECKED	KE	DRAWING NO.	REV. E
MFG. APPR.	MP	D3562	SHEET 1 OF 1
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	STEP ASSEMBLY	1:5
DATE	08.01.11	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	